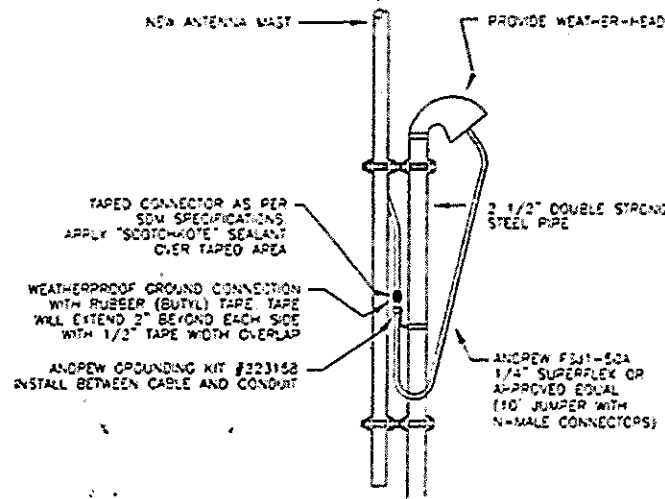
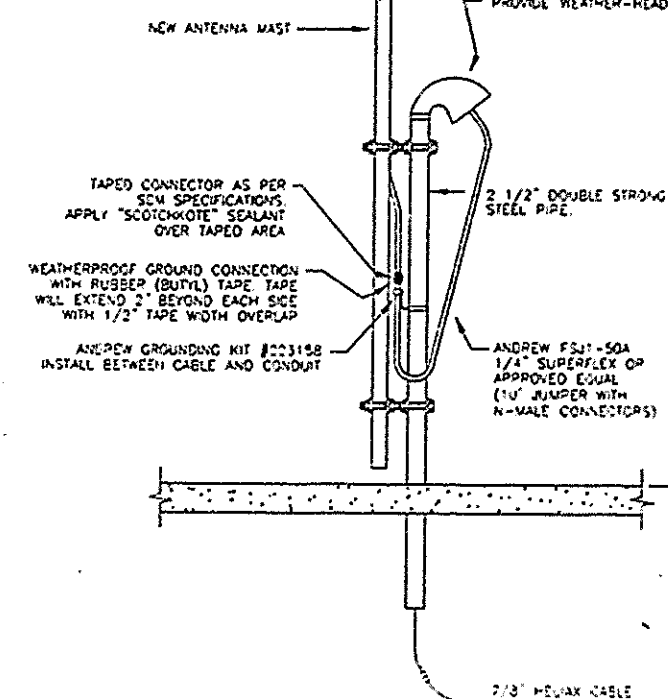


NEW DECIBEL ANTENNA  
MODEL DB-351 800 GAIN  
OR NEW SINCLAIR ANTENNA  
MODEL SPL-3020 1200 GAIN



DECIBEL & SINCLAIR - ANTENNA MOUNTING DETAIL  
(NOT TO SCALE)

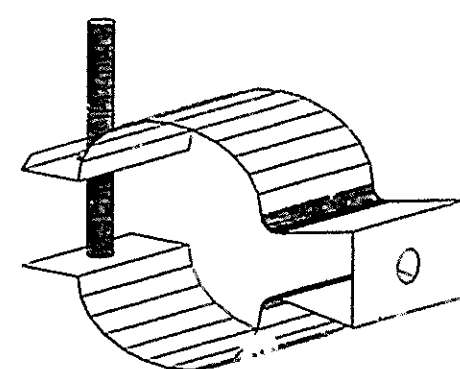
NEW SINCLAIR ANTENNA  
MODEL PR-850  
1700 GAIN



SINCLAIR - ANTENNA MOUNTING DETAIL  
(NOT TO SCALE)

## NOTES

- 1) INSTALL SIX ANTENNAS AND CABLES AS SHOWN ON NEW ROOF MOUNTS
- 2) FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF ANTENNAS AND CABLES
- 3) CABLE RUNS #2, 3, 4, 5, 6 & 7 SHALL BE 7/8" HELIAX CABLE ANDREW INC. MODEL #F311-52A OR APPROVED EQUAL
- 4) CABLE RUNS #2, 3, 4, 5, 6 & 7 LEAVE TEN (10) FEET SLACK ON THE ROOF FOR CONNECTIONS TO THE NEW ANTENNAS
- 5) SEAL ALL WALL PENETRATIONS WITH FIRESTOP SEALING COMPOUND AS APPROVED BY THE ENGINEER
- 6) CONTRACTOR SHALL REMOVE THE EXISTING MASTS AND ANTENNAS AFTER OUTDOOR TO THE NEW SYSTEM
- 7) FINAL CONNECTION AND ALIGNMENT OF ANTENNA BY OTHER VPA RADIO SHOP

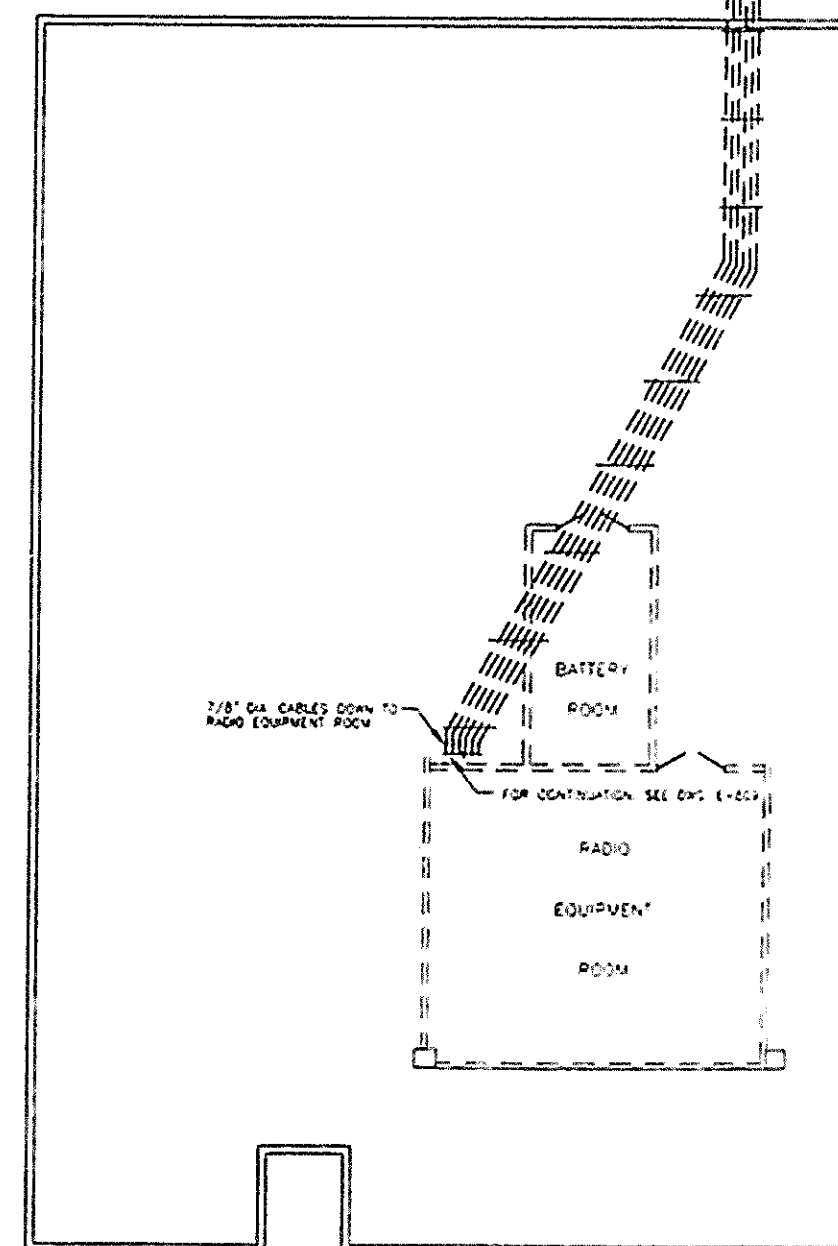
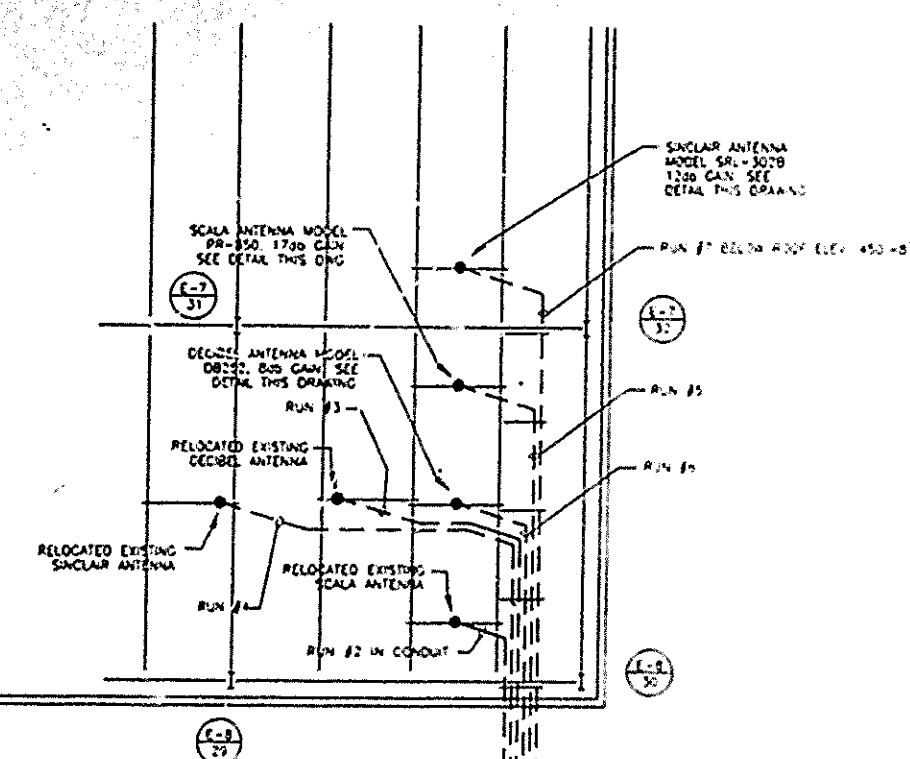


HANGER 'B'

CABLE SIZE	MAXIMUM SPACING	HANGER REFERENCE	MANUFACTURER	PART NUMBER
7/8"	6 ft	B	ANDREW CORP. OR EQUAL	42205A-S

- 1) PROVIDE HELIAX CABLE HANGER SUPPORT AS PER TABLE ABOVE. SUPPORT SPACING SHALL BE MAXIMUM OF 6 FEET APART
- 2) SECURE THE HANGER TO THE STEEL DECK ABOVE VIA EXPANSION ANCHORS OR EXISTING STEEL BEAMS VIA UNIVERSAL CLAMPS
- 3) SECURE THE HANGER TO THE GYPSUM BOARD WALL VIA SHEETROCK SCREWS OR UNIVERSAL FOR MULTIPLE CABLES

MOUNTING DETAIL FOR HELIAX CABLE  
(NTS)



PARTIAL ROOF PLAN

SCALE IN FEET

109 112

THE PORT AUTHORITY



CONFORMED  
2/1/98

Ram Communications  
Consultants, Inc.  
19 #2000 Center Drive  
Woodbury, NJ 07095  
(201) 536-6770 fax (201) 636-7260

The  
World  
Trade  
Center

STANDBY POWER  
5 WORLD TRADE CENTER  
COMMUNICATIONS

PARTIAL ROOF PLAN  
ANTENNA LOCATION

WTC-945 071

E-8/O